**tidyDataSet Project Code Book**

The tidyData text file consists of data with 81 variables capturing various averages for 30 study subjects performing 6 different activities for a total of 180 records of information. The variables are each described below:

[1] "activity": Describes the six activities being measured (LAYING, SITTING, STANDING, WALKING, WALKING\_DOWNSTAIRS, WALKING\_UPSTAIRS)

[2] "subject: Identifies the people involved in the study, numbered 1 through 30.

[3] "AveragetBodyAccAverageOfAxisX" : Average of the time domain Body’s Accelerometer measured averages from the X axis.

[4] "AveragetBodyAccAverageOfAxisY" : Average of the time Body’s domain Accelerometer measured averages from the Y axis.

[5] "AveragetBodyAccAverageOfAxisZ" : Average of the time domain Body’s Accelerometer measured averages from the Z axis.

[6] "AveragetBodyAccStdDevOfAxisX": Average of the time domain Body’s Accelerometer measured standard deviations from the X axis.

[7] "AveragetBodyAccStdDevOfAxisY": Average of the time domain Body’s Accelerometer measured standard deviations from the Y axis.

[8] "AveragetBodyAccStdDevOfAxisZ": Average of the time domain Body’s Accelerometer measured standard deviations from the X axis.

[9] "AveragetGravityAccAverageOfAxisX": Average of the time domain gravitational component Accelerometer measured averages from the X axis.

[10] "AveragetGravityAccAverageOfAxisY" : Average of the time domain gravitational component Accelerometer measured averages from the Y axis.

[11] "AveragetGravityAccAverageOfAxisZ" : Average of the time domain gravitational component Accelerometer measured averages from the Z axis.

[12] "AveragetGravityAccStdDevOfAxisX": Average of the time domain gravitational component Accelerometer measured standard deviations from the X axis.

[13] "AveragetGravityAccStdDevOfAxisY": Average of the time domain gravitational component Accelerometer measured standard deviations from the Y axis.

[14] "AveragetGravityAccStdDevOfAxisZ": Average of the time domain gravitational component Accelerometer measured standard deviations from the Z axis.

[15] "AveragetAccJerkOfBodyAverageOfAxisX" : Average of the time domain Body Jerk’s Accelerometer measured averages from the X axis.

[16] "AveragetAccJerkOfBodyAverageOfAxisY" : Average of the time domain Body Jerk’s Accelerometer measured averages from the Y axis.

[17] "AveragetAccJerkOfBodyAverageOfAxisZ" : Average of the time domain Body Jerk’s Accelerometer measured averages from the Z axis.

[18] "AveragetAccJerkOfBodyStdDevOfAxisX" : Average of the time domain Body Jerk’s Accelerometer measured standard deviations from the X axis.

[19] "AveragetAccJerkOfBodyStdDevOfAxisY" : Average of the time domain Body Jerk’s Accelerometer measured standard deviations from the Y axis.

[20] "AveragetAccJerkOfBodyStdDevOfAxisZ": Average of the time domain Body Jerk’s Accelerometer measured standard deviations from the Z axis.

[21] "AveragetBodyGyroAverageOfAxisX" : Average of the time domain Body’s Gyroscope measured averages from the X axis.

[22] "AveragetBodyGyroAverageOfAxisY" : Average of the time domain Body’s Gyroscope measured averages from the Y axis.

[23] "AveragetBodyGyroAverageOfAxisZ" : Average of the time domain Body’s Gyroscope measured averages from the Z axis.

[24] "AveragetBodyGyroStdDevOfAxisX" : Average of the time domain Body’s Gyroscope measured standard deviations from the X axis.

[25] "AveragetBodyGyroStdDevOfAxisY": Average of the time domain Body’s Gyroscope measured standard deviations from the Y axis.

[26] "AveragetBodyGyroStdDevOfAxisZ" : Average of the time domain Body’s Gyroscope measured standard deviations from the Z axis.

[27] "AveragetGyroJerkOfBodyAverageOfAxisX": Average of the time domain Body Jerk’s Gyroscope measured averages from the X axis.

[28] "AveragetGyroJerkOfBodyAverageOfAxisY": Average of the time domain Body Jerk’s Gyroscope measured averages from the Y axis.

[29] "AveragetGyroJerkOfBodyAverageOfAxisZ": Average of the time domain Body Jerk’s Gyroscope measured averages from the Z axis.

[30] "AveragetGyroJerkOfBodyStdDevOfAxisX" : Average of the time domain Body Jerk’s Gyroscope measured standard deviation from the X axis.

[31] "AveragetGyroJerkOfBodyStdDevOfAxisY": Average of the time domain Body Jerk’s Gyroscope measured standard deviation from the Y axis.

[32] "AveragetGyroJerkOfBodyStdDevOfAxisZ" : Average of the time domain Body Jerk’s Gyroscope measured standard deviation from the Z axis.

[33] "AveragetBodyAccMagnitudeAverage": Average of the time domain Body’s Accelerometer Magnitude averages.

[34] "AveragetBodyAccMagnitudeStdDev" : Average of the time domain Body’s Accelerometer Magnitude standard deviaitons.

[35] "AveragetGravityAccMagnitudeAverage": Average of the time domain Body’s Gravitational component Magnitude averages.

[36] "AveragetGravityAccMagnitudeStdDev": Average of the time domain Body’s Gravitational component Magnitude standard deviations.

[37] "AveragetAccJerkOfBodyMagnitudeAverage": Average of the time domain Body Jerk’s Accelerometer Magnitude averages.

[38] "AveragetAccJerkOfBodyMagnitudeStdDev" : Average of the time domain Body Jerk’s Accelerometer Magnitude standard deviations.

[39] "AveragetBodyGyroMagnitudeAverage": Average of the time domain Body Gyroscope Magnitude averages.

[40] "AveragetBodyGyroMagnitudeStdDev": Average of the time domain Body Gyroscope Magnitude standard deviations.

[41] "AveragetGyroJerkOfBodyMagnitudeAverage": Average of the time domain Body Jerk’s Gyroscope Magnitude averages.

[42] "AveragetGyroJerkOfBodyMagnitudeStdDev" : Average of the time domain Body Jerk’s Gyroscope standard deviations averages.

[43] "AveragefBodyAccAverageOfAxisX": Average of the frequency domain Body’s Accelerometer measured averages from the X axis.

[44] "AveragefBodyAccAverageOfAxisY": Average of the frequency domain Body’s Accelerometer measured averages from the Y axis.

[45] "AveragefBodyAccAverageOfAxisZ": Average of the frequency domain Body’s Accelerometer measured averages from the Z axis.

[46] "AveragefBodyAccStdDevOfAxisX" : Average of the frequency domain Body’s Accelerometer measured standard deviations from the X axis.

[47] "AveragefBodyAccStdDevOfAxisY": Average of the frequency domain Body’s Accelerometer measured standard deviations from the Y axis.

[48] "AveragefBodyAccStdDevOfAxisZ": Average of the frequency domain Body’s Accelerometer measured standard deviations from the Z axis.

[49] "AveragefBodyAccAverageFreqOfAxisX": Average of the frequency domain Body’s Accelerometer measured Frequency averages from the X axis.

[50] "AveragefBodyAccAverageFreqOfAxisY": Average of the frequency domain Body’s Accelerometer measured Frequency averages from the Y axis.

[51] "AveragefBodyAccAverageFreqOfAxisZ": Average of the frequency domain Body’s Accelerometer measured Frequency averages from the Z axis.

[52] "AveragefAccJerkOfBodyAverageOfAxisX": Average of the frequency domain Body Jerk’s Accelerometer measured averages from the X axis.

[53] "AveragefAccJerkOfBodyAverageOfAxisY": Average of the frequency domain Body Jerk’s Accelerometer measured averages from the Y axis.

[54] "AveragefAccJerkOfBodyAverageOfAxisZ": Average of the frequency domain Body Jerk’s Accelerometer measured averages from the Z axis.

[55] "AveragefAccJerkOfBodyStdDevOfAxisX": Average of the frequency domain Body Jerk’s Accelerometer measured standard deviations from the X axis.

[56] "AveragefAccJerkOfBodyStdDevOfAxisY": Average of the frequency domain Body Jerk’s Accelerometer measured standard deviations from the Y axis.

[57] "AveragefAccJerkOfBodyStdDevOfAxisZ" : Average of the frequency domain Body Jerk’s Accelerometer measured standard deviations from the Z axis.

[58] "AveragefAccJerkOfBodyAverageFreqOfAxisX": Average of the frequency domain Body Jerk’s Accelerometer measured Frequency averages from the X axis.

[59] "AveragefAccJerkOfBodyAverageFreqOfAxisY": Average of the frequency domain Body Jerk’s Accelerometer measured Frequency averages from the Y axis.

[59] "AveragefAccJerkOfBodyAverageFreqOfAxisZ": Average of the frequency domain Body Jerk’s Accelerometer measured Frequency averages from the Z axis.

[61] "AveragefBodyGyroAverageOfAxisX": Average of the frequency domain Body’s Gyroscope measured averages from the X axis.

[62] "AveragefBodyGyroAverageOfAxisY “: Average of the frequency domain Body’s Gyroscope measured averages from the Y axis.

[63] "AveragefBodyGyroAverageOfAxisZ": Average of the frequency domain Body’s Gyroscope measured averages from the Z axis.

[64] "AveragefBodyGyroStdDevOfAxisX": Average of the frequency domain Body’s Gyroscope measured standard deviations from the X axis.

[65] "AveragefBodyGyroStdDevOfAxisY": Average of the frequency domain Body’s Gyroscope measured standard deviations from the Y axis.

[66] "AveragefBodyGyroStdDevOfAxisZ": Average of the frequency domain Body’s Gyroscope measured standard deviations from the Z axis.

[67] "AveragefBodyGyroAverageFreqOfAxisX": Average of the frequency domain Body Jerk’s Gyroscope measured Frequency averages from the X axis.

[68] "AveragefBodyGyroAverageFreqOfAxisY": Average of the frequency domain Body Jerk’s Gyroscope measured Frequency averages from the Y axis.

[69] "AveragefBodyGyroAverageFreqOfAxisZ": Average of the frequency domain Body Jerk’s Gyroscope measured Frequency averages from the Z axis.

[70] "AveragefBodyAccMagnitudeAverage": Average of the frequency domain Body’s Accelerometer Magnitude averages.

[71] "AveragefBodyAccMagnitudeStdDev": Average of the frequency domain Body’s Accelerometer Magnitude standard deviations.

[72] "AveragefBodyAccMagnitudeAverageFreq": Average of the frequency domain Body’s Accelerometer Frequency Magnitude averages.

[73] "AveragefBodyAccJerkOfBodyMagnitudeAverage": Average of the frequency domain Body Jerk’s Accelerometer Magnitude averages.

[74] "AveragefBodyAccJerkOfBodyMagnitudeStdDev": Average of the frequency domain Body Jerk’s Accelerometer Magnitude standard deviations.

[75] "AveragefBodyAccJerkOfBodyMagnitudeAverageFreq": Average of the frequency domain Body Jerk’s Accelerometer Frequency Magnitude averages.

[76] "AveragefBodyBodyGyroMagnitudeAverage": Average of the frequency domain Body’s Gyroscope Magnitude averages.

[77] "AveragefBodyBodyGyroMagnitudeStdDev" : Average of the frequency domain Body’s Gyroscope standard deviation.

[78] "AveragefBodyBodyGyroMagnitudeAverageFreq": Average of the frequency domain Body’s Gyroscope Frequency Magnitude averages.

[79] "AveragefBodyGyroJerkOfBodyMagnitudeAverage": Average of the frequency domain Body Jerk’s Gyroscope Magnitude averages.

[80] "AveragefBodyGyroJerkOfBodyMagnitudeStdDev" : Average of the frequency domain Body Jerk’s Gyroscope Magnitude standard deviations.

[81] "AveragefBodyGyroJerkOfBodyMagnitudeAverageFreq": Average of the frequency domain Body Jerk’s Gyroscope Frequency Magnitude averages.